Release notes for ENDF/B Development n-052_Te_130 evaluation

April 26, 2017

- **checkr** Warnings:

    1. A previous error halted parsing of the current section
       MAT=5255, MF= 1, MT=451 (1): Parsing stopped

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 1, MT=451
            SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER     104 TO     160
       ```

- **checkr** Errors:

    1. A variable is outside the allowed ENDF range
       MAT=5255, MF= 1, MT=451 (0): Variable range

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 1, MT=451
            MOD =    1 OUT OF RANGE    0 -    0          RECORD NUMBER     104
       ```

    2. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=5255, MF= 2, MT=151 (0): Directory (b)

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 2, MT=151
            SECTION  2/151 NOT IN DIRECTORY            RECORD NUMBER     162
       ```

    3. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=5255, MF= 3, MT= 1 (0): Directory (b)

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 3, MT=  1
            SECTION  3/  1 NOT IN DIRECTORY            RECORD NUMBER     243
       ```

    4. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=5255, MF= 3, MT= 2 (0): Directory (b)

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 3, MT=  2
            SECTION  3/  2 NOT IN DIRECTORY            RECORD NUMBER     281
       ```

    5. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=5255, MF= 3, MT= 4 (0): Directory (b)

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 3, MT=  4
            SECTION  3/  4 NOT IN DIRECTORY            RECORD NUMBER     319
       ```

    6. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=5255, MF= 3, MT= 16 (0): Directory (b)

       ```
       ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 16
            SECTION  3/ 16 NOT IN DIRECTORY            RECORD NUMBER     352
       ```

    7. Missing a section in directory so your directory is messed up. This error will break everything else
       MAT=5255, MF= 3, MT= 17 (0): Directory (b)

1

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 17
        SECTION  3/ 17 NOT IN DIRECTORY                    RECORD NUMBER     370
```

8. Missing a section in directory so your directory is messed up. This error will break everything else
   $MAT=5255,\ MF=\ 3,\ MT=\ 22\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 22
        SECTION  3/ 22 NOT IN DIRECTORY                    RECORD NUMBER     380
```

9. Missing a section in directory so your directory is messed up. This error will break everything else
   $MAT=5255,\ MF=\ 3,\ MT=\ 28\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 28
        SECTION  3/ 28 NOT IN DIRECTORY                    RECORD NUMBER     393
```

10. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 3,\ MT=\ 51\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 51
        SECTION  3/ 51 NOT IN DIRECTORY                    RECORD NUMBER     406
```

11. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 3,\ MT=\ 52\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 52
        SECTION  3/ 52 NOT IN DIRECTORY                    RECORD NUMBER     439
```

12. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 3,\ MT=\ 53\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 53
        SECTION  3/ 53 NOT IN DIRECTORY                    RECORD NUMBER     470
```

13. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 3,\ MT=\ 54\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 54
        SECTION  3/ 54 NOT IN DIRECTORY                    RECORD NUMBER     501
```

14. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 3,\ MT=\ 55\ (0)$: Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 55
        SECTION  3/ 55 NOT IN DIRECTORY                    RECORD NUMBER     531
```

15. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 3,\ MT=\ 56\ (0)$: Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 56
           SECTION  3/ 56 NOT IN DIRECTORY                    RECORD NUMBER    561
```

16. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 57 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 57
           SECTION  3/ 57 NOT IN DIRECTORY                    RECORD NUMBER    591
```

17. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 58 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 58
           SECTION  3/ 58 NOT IN DIRECTORY                    RECORD NUMBER    620
```

18. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 59 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 59
           SECTION  3/ 59 NOT IN DIRECTORY                    RECORD NUMBER    649
```

19. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 60 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 60
           SECTION  3/ 60 NOT IN DIRECTORY                    RECORD NUMBER    678
```

20. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 61 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 61
           SECTION  3/ 61 NOT IN DIRECTORY                    RECORD NUMBER    706
```

21. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 62 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 62
           SECTION  3/ 62 NOT IN DIRECTORY                    RECORD NUMBER    734
```

22. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 63 (0): Directory (b)

```
        ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 63
           SECTION  3/ 63 NOT IN DIRECTORY                    RECORD NUMBER    762
```

23. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 64 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 64
    SECTION  3/ 64 NOT IN DIRECTORY                RECORD NUMBER    789
```

24. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 65 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 65
    SECTION  3/ 65 NOT IN DIRECTORY                RECORD NUMBER    816
```

25. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT= 91
    SECTION  3/ 91 NOT IN DIRECTORY                RECORD NUMBER    843
```

26. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT=102
    SECTION  3/102 NOT IN DIRECTORY                RECORD NUMBER    868
```

27. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT=103 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT=103
    SECTION  3/103 NOT IN DIRECTORY                RECORD NUMBER    906
```

28. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT=104 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT=104
    SECTION  3/104 NOT IN DIRECTORY                RECORD NUMBER    927
```

29. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT=105 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT=105
    SECTION  3/105 NOT IN DIRECTORY                RECORD NUMBER    942
```

30. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 3, MT=107 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 3, MT=107
    SECTION  3/107 NOT IN DIRECTORY                RECORD NUMBER    954
```

31. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 2 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT=  2
         SECTION  4/  2 NOT IN DIRECTORY              RECORD NUMBER      976
```

32. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 16 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 16
         SECTION  4/ 16 NOT IN DIRECTORY              RECORD NUMBER     1387
```

33. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 17 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 17
         SECTION  4/ 17 NOT IN DIRECTORY              RECORD NUMBER     1418
```

34. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 22 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 22
         SECTION  4/ 22 NOT IN DIRECTORY              RECORD NUMBER     1437
```

35. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 28 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 28
         SECTION  4/ 28 NOT IN DIRECTORY              RECORD NUMBER     1462
```

36. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 51 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 51
         SECTION  4/ 51 NOT IN DIRECTORY              RECORD NUMBER     1487
```

37. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 52 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 52
         SECTION  4/ 52 NOT IN DIRECTORY              RECORD NUMBER     1598
```

38. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 53 (0): Directory (b)

```
     ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 53
         SECTION  4/ 53 NOT IN DIRECTORY              RECORD NUMBER     1705
```

39. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 4, MT= 54 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 54
    SECTION  4/ 54 NOT IN DIRECTORY                RECORD NUMBER    1752
```

40. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 55 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 55
    SECTION  4/ 55 NOT IN DIRECTORY                RECORD NUMBER    1799
```

41. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 56 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 56
    SECTION  4/ 56 NOT IN DIRECTORY                RECORD NUMBER    1903
```

42. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 57 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 57
    SECTION  4/ 57 NOT IN DIRECTORY                RECORD NUMBER    1950
```

43. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 58 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 58
    SECTION  4/ 58 NOT IN DIRECTORY                RECORD NUMBER    1995
```

44. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 59 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 59
    SECTION  4/ 59 NOT IN DIRECTORY                RECORD NUMBER    2097
```

45. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 60 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 60
    SECTION  4/ 60 NOT IN DIRECTORY                RECORD NUMBER    2142
```

46. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 61 (0): Directory (b)$

```
ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 61
    SECTION  4/ 61 NOT IN DIRECTORY                RECORD NUMBER    2244
```

47. Missing a section in directory so your directory is messed up. This error will break everything else
$MAT=5255, MF= 4, MT= 62 (0): Directory (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 62
            SECTION  4/ 62 NOT IN DIRECTORY                RECORD NUMBER    2344
```

48. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 4,\ MT=\ 63\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 63
            SECTION  4/ 63 NOT IN DIRECTORY                RECORD NUMBER    2444
```

49. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 4,\ MT=\ 64\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 64
            SECTION  4/ 64 NOT IN DIRECTORY                RECORD NUMBER    2489
```

50. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 4,\ MT=\ 65\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 65
            SECTION  4/ 65 NOT IN DIRECTORY                RECORD NUMBER    2534
```

51. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 4,\ MT=\ 91\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 4, MT= 91
            SECTION  4/ 91 NOT IN DIRECTORY                RECORD NUMBER    2579
```

52. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 5,\ MT=\ 16\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 5, MT= 16
            SECTION  5/ 16 NOT IN DIRECTORY                RECORD NUMBER    2621
```

53. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 5,\ MT=\ 17\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 5, MT= 17
            SECTION  5/ 17 NOT IN DIRECTORY                RECORD NUMBER    2751
```

54. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 5,\ MT=\ 22\ (0):\ Directory\ (b)$

```
        ERROR(S) FOUND IN MAT=5255, MF= 5, MT= 22
            SECTION  5/ 22 NOT IN DIRECTORY                RECORD NUMBER    2821
```

55. Missing a section in directory so your directory is messed up. This error will break everything else
    $MAT=5255,\ MF=\ 5,\ MT=\ 28\ (0):\ Directory\ (b)$

```
   ERROR(S) FOUND IN MAT=5255, MF= 5, MT= 28
       SECTION  5/ 28 NOT IN DIRECTORY                    RECORD NUMBER    2914
```

56. Missing a section in directory so your directory is messed up. This error will break everything else
    MAT=5255, MF= 5, MT= 91 (0): Directory (b)

```
   ERROR(S) FOUND IN MAT=5255, MF= 5, MT= 91
       SECTION  5/ 91 NOT IN DIRECTORY                    RECORD NUMBER    3007
```

- psyche   Warnings:

  1. Strength function in URR not in agreement with PSYCHE's expectations
     FILE 2 / SECTION 151 / ISOTOPE MASS = 130. L = 0 / STRENGTH FUNCTION IS 6.78220E-06 / AVERAGE GAMMA WIDTH 3.50000E-02 / LIES OUTSIDE LIMITS 4.00000E-02 TO 9.00000E+00 EV. (0): URR str. ftn.

```
   FILE   2
       SECTION 151
           ISOTOPE MASS = 130. L =   0
                        STRENGTH FUNCTION IS   6.78220E-06
                                    AVERAGE GAMMA WIDTH 3.50000E-02
   ... [1 more lines]
```

  2. Strength function in URR not in agreement with PSYCHE's expectations
     FILE 2 / SECTION 151 / ISOTOPE MASS = 130. L = 0 / STRENGTH FUNCTION 6.78220E-06 / LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04 (0): URR str. ftn.

```
   FILE   2
       SECTION 151
           ISOTOPE MASS = 130. L =   0
                        STRENGTH FUNCTION 6.78220E-06
                                          LIES OUTSIDE LIMITS 1.00000E-05 TO 1.00000E-04
```

  3. Strength function in URR not in agreement with PSYCHE's expectations
     FILE 2 / SECTION 151 / ISOTOPE MASS = 130. L = 1 / STRENGTH FUNCTION IS 7.71536E-05 / STRENGTH FUNCTION 7.71536E-05 / LIES OUTSIDE LIMITS 1.00000E-04 TO 8.00000E-04 (0): URR str. ftn.

```
   FILE   2
       SECTION 151
           ISOTOPE MASS = 130. L =   1
                        STRENGTH FUNCTION IS   7.71536E-05
                                    STRENGTH FUNCTION 7.71536E-05
   ... [1 more lines]
```

  4. Level density in URR not in agreement with PSYCHE's expectations
     FILE 2 / SECTION 151 / ENERGY = 3.10000E+04. STRENGTH FUNCTION IS 1.60000E-04 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 1.99460E-04 / DENSITY 3.29450E+03 SHOULD BE 3.54445E+03 (0): URR dens. (a)

```
   FILE   2
       SECTION 151
           ENERGY =  3.10000E+04. STRENGTH FUNCTION IS  1.60000E-04
                        ENERGY =  1.00000E+05. STRENGTH FUNCTION IS  1.99460E-04
                                    DENSITY  3.29450E+03 SHOULD BE  3.54445E+03
```

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5. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.10000E+04. STRENGTH FUNCTION IS 9.90000E-05 / ENERGY = 1.00000E+05. STRENGTH FUNCTION IS 1.02953E-04 / DENSITY 2.52960E+03 SHOULD BE 2.46300E+03 (0): URR dens. (a)

```
FILE  2
   SECTION 151
         ENERGY =  3.10000E+04. STRENGTH FUNCTION IS  9.90000E-05
                     ENERGY =  1.00000E+05. STRENGTH FUNCTION IS  1.02953E-04
                                 DENSITY  2.52960E+03 SHOULD BE  2.46300E+03
```

- `groupie` Errors:

   1. Very small elastic cross section found
   0: Small elastic

   ```
   Multi-Group and Multi-Band Parameters from ENDF/B Data (GROUPIE 2015-2)
   ----------------------------------------------------------------------------
   ENDF/B Input and Output Data Filenames
   ENDFB.IN
   ENDFB.OUT
   ... [97 more lines]
   ```

- `fudge-4.0` Warnings:

   1. Missing a channel with a particular angular momenta combination
   resonances / resolved / MultiLevel_BreitWigner (Error # 0): missingResonanceChannel

   ```
   WARNING: Missing a channel with angular momenta combination L = 0, J = 1.5 and S = 1.5 for "capture"
   WARNING: Missing a channel with angular momenta combination L = 1, J = 0.5 and S = 1.5 for "capture"
   WARNING: Missing a channel with angular momenta combination L = 1, J = 1.5 and S = 1.5 for "capture"
   WARNING: Missing a channel with angular momenta combination L = 1, J = 2.5 and S = 1.5 for "capture"
   ```

- `fudge-4.0` Errors:

   1. Energy range of data set does not match cross section range
   reaction label 1: n + Te130_e1 / Product: n / Distribution: / angularTwoBody - XYs2d: (Error # 0): Domain mismatch (a)

   ```
   WARNING: Domain doesn't match the cross section domain: (846020.1 -> 20000000.0) vs (846020.0 -> 20000000.0)
   ```

   2. Calculated and tabulated Q values disagree.
   reaction label 17: n[multiplicity:'2'] + Te129 (Error # 0): Q mismatch

   ```
   WARNING: Calculated and tabulated Q-values disagree: -8670957.263275146 eV vs -8.413e6 eV!
   ```

   3. Energy range of data set does not match cross section range
   reaction label 17: n[multiplicity:'2'] + Te129 / Product: n / Distribution: / uncorrelated - angular - XYs2d: (Error # 0): Domain mismatch (a)

   ```
   WARNING: Domain doesn't match the cross section domain: (8478301.0 -> 20000000.0) vs (8478300.0 -> 20000000.0)
   ```

   4. Energy range of data set does not match cross section range
   reaction label 17: n[multiplicity:'2'] + Te129 / Product: n / uncorrelated - energy - XYs2d: (Error # 0): Domain mismatch (a)

```
WARNING: Domain doesn't match the cross section domain: (8478301.0 -> 20000000.0) vs (8478300.0 -> 20000000.0)
```

5. Calculated and tabulated Q values disagree.
   reaction label 18: n[multiplicity:'3'] + Te128 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -14753365.37049866 eV vs -1.4498e7 eV!
```

6. Calculated and tabulated Q values disagree.
   reaction label 19: n + H1 + Sb129 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -10264110.46911621 eV vs -1.0012e7 eV!
```

7. Calculated and tabulated Q values disagree.
   reaction label 20: Te131 + gamma (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 5677968.439926147 eV vs 5.9297e6 eV!
```

8. Calculated and tabulated Q values disagree.
   reaction label 21: n + He4 + Sn126 (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -4007320.919662476 eV vs -3.7513e6 eV!
```

9. Calculated and tabulated Q values disagree.
   reaction label 22: H1 + Sb130_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -4528870.193206787 eV vs -4.2356e6 eV!
```

10. Calculated and tabulated Q values disagree.
    reaction label 23: H2 + Sb129_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -8039544.368179321 eV vs -7.788e6 eV!
```

11. Calculated and tabulated Q values disagree.
    reaction label 24: H3 + Sb128_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: -9872779.443130493 eV vs -9.616e6 eV!
```

12. Calculated and tabulated Q values disagree.
    reaction label 25: He4 + Sn127_s (Error # 0): Q mismatch

```
WARNING: Calculated and tabulated Q-values disagree: 1542680.587081909 eV vs 1.803e6 eV!
```

- `njoy2012` Warnings:

  1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
     groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

```
     ---message from conver---cannot do complete particle production for mt= 16
                         only mf4/mf5 provided
```

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

```
   ---message from conver---cannot do complete particle production for mt= 17
                           only mf4/mf5 provided
```

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

```
   ---message from conver---cannot do complete particle production for mt= 22
                           only mf4/mf5 provided
```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

```
   ---message from conver---cannot do complete particle production for mt= 28
                           only mf4/mf5 provided
```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
   groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

```
   ---message from conver---cannot do complete particle production for mt= 91
                           only mf4/mf5 provided
```